

Appl. No. 10/707,646
Amdt. dated August 16, 2006
Reply to Office action of May 30, 2006

Amendments to the Specification:

Please replace paragraph [0012] with the following amended paragraph:

[0012] According to the claimed invention, a pixel structure of an active matrix display device is provided. The pixel structure includes a storage capacitor, a first active device, and a plurality of active-type light emitting devices. The active-type light emitting devices electrically are connected in parallel with each other, and each of the active-type light emitting devices is connected between a source of first potential and a source of second potential. The first active device has having a first end electrically connected to a scanning line, a second end electrically connected to a data line, and a third end electrically connected to a switching end of each of the active-type light emitting devices. In addition, the active-type light emitting devices are electrically connected to the first active device as many-to-one mapping relation. The storage capacitor has a first electrode electrically connected to the third end of the first active device and the switching end of the active-type light emitting devices, and a second electrode electrically connected to the source of first potential end, a third end electrically connected to the storage capacitor, and a plurality of active-type light emitting devices electrically connected in parallel with each other between a source of first potential, a source of second potential, and the third end.

Please replace paragraph [0013] with the following amended paragraph:

[0013] It is an advantage over the prior art that the claimed invention provides a pixel comprising a plurality of active-type light emitting devices connected in parallel with each other. Each active-type light emitting device is connected in series to an active device that is used to supply a driving current to the light emitting device. Therefore, when an electrical shortage occurs in one of the active-type light emitting devices of a

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pixel, the pixel still can display an image via the other active-type light emitting devices of the pixel. Therefore, it is unnecessary to utilize laser beams to repair defects, so that the production time can be saved and the yield can be effectively improved.

5 Please replace paragraph [0022] with the following amended paragraph:

[0022] Please refer to Fig.6. Fig.6 is a circuit diagram of one of the pixels 52 shown in Fig.5. As shown in Fig.6, the pixel 52 comprises a storage capacitor 54, an active device 56, and a plurality of active-type light emitting devices 58 that are connected in parallel with each other. In addition, the active-type light emitting devices 58 are electrically
10 connected to the active device 56 as many-to-one mapping relation. Each active-type light emitting device 58 comprises an active device 60 (T1, T2, T3 or T4) and a light emitting device 62 (D1, D2, D3 or D4). The active-type light emitting devices 58 are electrically connected between a potential source 64, a potential source 66, and ~~an end~~ a first
15 electrode 54a of the storage capacitor 54. Additionally, the potential source 64 is used to supply a potential V1, while the potential source 66 is used to supply a potential V2 that is a reference potential (ex. grounding potential) and is usually smaller than V1. Furthermore, each of the active devices 56, 60 is a thin film transistor or a complementary metal-oxide semiconductor (CMOS), and each of the light emitting devices 62 is an organic light emitting diode or a light emitting diode (LED).

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Please replace paragraph [0023] with the following amended paragraph:

[0023] In the preferred embodiment of the present invention, the active matrix display device 40 is an organic light emitting display device. Accordingly, each of the light emitting devices 62 is an organic light emitting diode, while the active device 56 is a thin

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film transistor comprising a gate electrode 56a electrically connected to the scanning line 48, a drain electrode 56b electrically connected to the data line 50, and a source electrode 56c electrically connected to the ~~end~~ first electrode 54a of the storage capacitor 54. Furthermore, each of the active devices 60 is a thin film transistor comprising a gate electrode 60a as a switching end of the active device 60 that electrically connects to the source electrode 56c of the thin film transistor 56, a source electrode 60c electrically connected to the potential source 64, and a drain electrode 60b electrically connected to an anode 62a of the organic light emitting diode 62 whose cathode 62b is electrically connected to the potential source 66. In addition, ~~an end~~ a second electrode 54b of the storage capacitor 54 is electrically connected to the potential source 64, and moreover, the ~~end~~ second electrode 54b of the storage capacitor 54 also can be electrically connected to any other potential source capable of supplying a constant potential.

15 Please replace paragraph [0025] with the following amended paragraph:

[0025] Additionally, if the anode 62a and the cathode 62b of the organic light emitting diodes D1 are contacted with each other due to process errors or other factors, an electrical storage occurs in the organic light emitting diodes 62 (ex. D1). Accordingly, the driving current supplied by the thin film transistor T1 cannot make the organic light emitting diodes D1 radiate light beams. Noticeably, since the pixel 52 shown in Fig.6 comprises four active-type light emitting devices 58 connected in parallel with each other, the thin film transistors T2, T3, and T4 still can supply driving currents to the organic light emitting diodes D2, D3, and D4. Therefore, the organic light emitting diodes D2, D3, and D4 still can radiate light beams to maintain the pixel 52 on a luminous state. In other words, as long as at least one of the organic light emitting diodes 62 in a pixel 52 is good, the pixel 52 can radiate light beams normally. Therefore, it is unnecessary to utilize laser

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beams to repair defects in the present invention. As a result, the yield can be effectively improved.

Please replace paragraph [0027] with the following amended paragraph:

- 5 [0027] In contrast to the prior art, the present invention provides a pixel comprising a plurality of active-type light emitting devices connected in parallel with each other. Each active-type light emitting device is connected in series to an active device that is used to supply a driving current to the light emitting device. Therefore, when an electrical shortage occurs in one of the active-type light emitting devices of a pixel, the pixel still
- 10 can display an image via the other active-type light emitting devices of the pixel. Therefore, it is unnecessary to utilize laser beams to repair defects, so that the production time can be saved and the yield can be effectively improved.